

Chronic Medication and/or Monitoring for Long Duration Space Flight: What Should The Policy Be?

While a private individual with a chronic medical condition could perhaps justifiably claim the right to become a "space tourist" through informed consent, NASA and other International crew members are national assets, trained at government expense to fulfill a mission considered essential to national goals. The medical requirements/policy for selection and certification of crewmembers for long duration missions to the International Space Station (ISS) should address:

- Crewmembers with chronic conditions that require regular dosing of life-sustaining medication for the purposes of secondary or tertiary prevention (i.e. tumor suppression therapy or anticoagulation).
- Crew members with conditions that will be worsened by spaceflight exposure, placing them at additional personal health risk though not necessarily increasing mission risk (i.e. previous radiation exposure or preflight osteopenia/osteoporosis)

The following policies are recommended. A crewmember should not be assigned to an International Space Station mission who:

- Requires medications to sustain life or who has a disease, which requires medical procedures or diagnostics to monitor and treat same.
- Has medical condition, which would prevent participation as a candidate in many scientific and medical operational research studies, as their underlying condition would confound the collected data.
- Requires specialized medical devices for monitoring or treatment of a medical condition, including conditions that require special provisions to conduct routine required countermeasure activities.
- Who has a disease or requires treatment for same, and for which the effects of space travel may be deleterious to the short or long term health of the individual,

An evidence-based approach will be used to provide rationale for policy recommendations under these scenarios. Operational impacts of allowing these medical conditions to fly on the ISS will also be presented.